

## Science Toolkit: Grade 6 Objective 4.C.1.a

Student Handout: Science: Grade 6 Objective 4.C.1.a

Standard 4.0 Chemistry

Topic C. States of Matter

Indicator 1. Provide evidence and examples illustrating that many substances can exist as a solid, liquid, or gas depending on temperature.

Objective a. Use evidence from investigations to describe the effect that adding heat energy to different types of matter has on changing matter from one state to another.

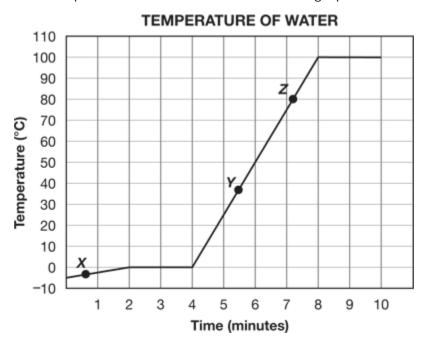
Selected Response (SR) Item

Question

Use the information and graph below to answer the following question.

## Heating Distilled Water

A group of students conducted an investigation. They placed 10 grams of ice at  $-5^{\circ}$ C and a thermometer into a beaker. The students then placed the beaker on an electric hot plate and heated the beaker of ice for 10 minutes. The students read the thermometer every minute, recorded the temperature, and then constructed the graph below.



Adding heat energy to the water in this investigation caused a

- A. physical change from a solid to a liquid
- B. physical change from a liquid to a solid
- C. chemical change from a solid to a liquid

D. chemical change from a liquid to a solid

Correct Answer

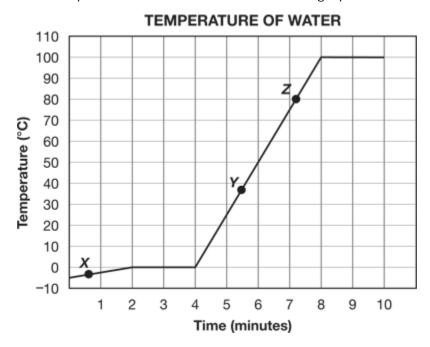
A. physical change from a solid to a liquid

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